

REMARKS

The present Amendment is in response to the Office Action mailed October 22, 2004 in the above-identified patent application.

In the present Amendment, Applicants have amended claims 1, 4-9, 11, 13 and 16. Claims 3, 10, 12 and 17-19 have been canceled. Support for the limitations added to independent claims 1 and 16 is found, *inter alia* in paragraphs 26-35 of the specification and FIGS. 4-5 and 20-21 of the drawings. Applicants have also amended the Abstract of the Disclosure.

In the Office Action, the Examiner rejected claim 5 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner asserted that the claim 5 recitation of "the anterior flange" lacks antecedent basis. In response, Applicants have amended claim 5 to depend from claim 4. In view of the above noted amendment, Applicants respectfully assert that claim 5 now satisfies the requirements of 35 U.S.C. § 112, second paragraph, and is otherwise allowable.

The Examiner objected to claim 3 as having the informalities identified on page 2 of the Office Action. As noted above, the limitations of claim 3 have been incorporated into claim 1, which has been amended to utilize the terminology -- comprising -- rather than "includes." A similar amendment has been made to claim 16.

The Examiner rejected claims 1-3 and 7-19 under 35 U.S.C. § 102(e) as being anticipated by United States Patent Publication No. U.S. 2004/0133281 to Khandkar et al. Referring to FIGS. 7-12 thereof, Khandkar discloses an implant including an upper endplate 30 and a lower endplate 40. Referring to FIG. 8, the upper endplate 30 has a partially cylindrical downwardly concave bearing component 42. The lower endplate 32 has a partially cylindrical and upwardly convex elongated bearing component 44. Referring to FIG. 11, the bearing component 42 includes an articulating surface having two radii that are offset by a flat section. The partially cylindrical convex elongated bearing for component 44 is described as having a similar arrangement of two radii separated by a flat section. Applicants respectfully assert that claim 1 is unanticipated by Khandkar because the cited reference neither teaches nor suggests a method for replacing at least a portion of an intervertebral disc including inserting an apparatus having a first member with

a first articulation surface, the entirety of the first articulation surface being a single saddle surface that is defined by a concave arc having a

substantially constant radius of curvature A about an axis perpendicular to leading and trailing ends of the first member and a convex arc having a substantially constant radius of curvature B about an axis perpendicular to lateral sides of the first member.

Claim 1 is also unanticipated because Khandkar neither discloses nor suggests a method for replacing at least a portion of an intervertebral disc including inserting an apparatus having a second member with

a second articulation surface, the entirety of the second articulation surface being a single saddle surface that is defined by a convex arc having a substantially constant radius of curvature C about an axis perpendicular to leading and trailing ends of the second member and a concave arc having a substantially constant radius of curvature D about an axis perpendicular to lateral sides of the second member.

For the above reasons, claim 1 is unanticipated by Khandkar and is otherwise allowable. Claims 2, 7-9, 11 and 13-15 are unanticipated, *inter alia*, by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

Independent claim 16 is allowable for essentially the same reasons set forth above with respect to claim 1.

The Examiner also rejected claims 1-3 and 8-19 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. US 2004/0024462 to Ferree et al. Claim 1 is unanticipated by Ferree because it includes limitations neither taught nor suggested by Ferree including the limitation that "the constant radius of curvature A is non-congruent with the constant radius of curvature C and the constant radius of curvature B is non-congruent with the constant radius of curvature D." Claims 2, 8-9, 11 and 13-15 are unanticipated, *inter alia*, by virtue of their dependence from claim 1.

Independent claim 16 is unanticipated for essentially the same reasons set forth above with respect to claim 1.

The Examiner rejected claims 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Khandkar in view of U.S. Patent No. 6,228,118 to Gordon et al. The Examiner has cited Gordon et al. as teaching flanges having through holes for receiving bone screws so as to secure the implant member to bone. In response to the Examiner's objection, Applicants respectfully assert that Gordon et al. does not overcome the deficiencies noted above in Khandkar. Thus, Applicants respectfully assert that claims 4 and 5 are unobvious and allowable, *inter alia*, by virtue of their dependence from claim 1, which is patentable for the reasons set forth above.

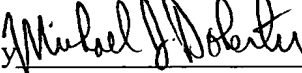
As it is believed that all of the rejections set forth in the Office Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that she telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which she might have.

If there are any additional charges in connection with this requested Amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: January 19, 2005

Respectfully submitted,

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ABSTRACT

A method for replacing at least a portion of an intervertebral disc in a spinal column includes: removing the portion of the intervertebral disc from the spinal column; and inserting an apparatus for replacing the portion of the intervertebral disc. ~~wherein the~~ The apparatus ~~for replacing the portion of the intervertebral disc~~ is operable to permit respective vertebral bones of the spinal column between which the apparatus is positioned to articulate in flexion and extension in an anterior-posterior plane of the spinal column, lateral bending in a lateral plane of the spinal column, and axial rotation through a range of angles without permitting the vertebral bones to substantially move in directions directed away from one another along a longitudinal axis of the spinal column.

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